



## ***Z SERIES SMOKE MACHINES' MANUAL***

Manual for Smoke Machines: UF-F80z, UF-Z800, UF-Z1000, and UF-Z1500

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## **Unifire Z Series Fog Machine**



***Congratulations on the purchase of your new  
UNIFIRE Z Series FOG MACHINE.***

### **Introduction**

Thank you for choosing an UNIFIRE Fog Machine. You now own a rugged and powerful state-of-the-art machine. Prior to use, we suggest that you carefully read all of the instructions. By following the suggestions found in this user manual, you can look forward to the reliable and satisfactory performance of your UNIFIRE Fog Machine for years to come.

**Please follow these operation, safety and maintenance instructions to ensure a long and safe life for your fog machine.**

### **Cautions**

**Risk of electric shock. Disconnect the appliance from the electric supply before removing the cover. Note: there are no user serviceable parts inside.**

#### *Danger of electric shock*

- ◆ Keep this device dry.
- ◆ For inside use only. Not designed for outside use.
- ◆ For the 110V models, use 3-prong grounded electrical outlet only. Prior to use take care to determine that the unit is installed at the rated voltage.
- ◆ Always unplug your UNIFIRE Fog Machine before filling its tank.
- ◆ Keep fog machine upright.
- ◆ Turn off or unplug when not in use.
- ◆ This machine is not water- or splash-proof. If moisture, water, or fog liquid gets inside the housing, immediately unplug the unit and contact a service technician or your UNIFIRE dealer before using it again.
- ◆ No user serviceable parts inside. Refer to your UNIFIRE dealer or other qualified service personnel.

#### *Danger of burns*

- ◆ For adult use only. Fog machine must be installed out of the reach of children. Never leave the unit running unattended.
- ◆ Never aim the output nozzle directly at people.

- ◆ Fog machine output is very hot. Avoid coming within 60 cm of the output nozzle during operation.
- ◆ Locate the fog machine in a well-ventilated area. Never cover the unit's vents. In order to guarantee adequate ventilation, allow a free air space of at least 20 cm around the sides and top of the unit.
- ◆ Never aim the output nozzle at open flames.
- ◆ If the supply cord is damaged, it must be replaced by manufacturer or its service agent or similarly qualified person in order to avoid a hazard.
- ◆ The output nozzle becomes very hot during operation (300°C). Keep flammable materials at least 50 cm away from the nozzle.
- ◆ Always allow your UNIFIRE Fog Machine to cool down before attempting to clean or service it.

#### *Danger of explosion*

- ◆ Never add flammable liquids of any kind (oil, gas, perfume) to the fog liquid.

#### *Pay attention to all warning labels and instructions printed on the exterior of your UNIFIRE Fog Machine*

- ◆ Use only the high-quality, water-based fog liquid that your dealer recommends. Other fog liquids may cause clogging or "spitting".
- ◆ Always make sure there is sufficient liquid in the fog liquid tank. Operating this unit without liquid will cause damage to the pump as well as over-heating of the heater.
- ◆ If your UNIFIRE Fog Machine fails to work properly, discontinue use immediately. Drain all fog liquid from the tank, pack the unit securely (preferably in the original packing material), and return it to your UNIFIRE dealer for service.
- ◆ Always drain tank before mailing or transporting this unit.
- ◆ Never drink fog liquid. If it is ingested, call a doctor immediately. If fog liquid comes in contact with skin or eyes, rinse thoroughly with water.

### **Unpacking & Inspection**

Open the shipping carton and verify that all equipment necessary to operate the system has arrived intact. Refer to the "Features" section for information on what items are included with your model. If any equipment is missing contact your UNIFIRE dealer immediately.

Before beginning initial setup of your UNIFIRE Fog Machine, make sure that there is no evident damage caused by transportation. In the event that the unit's housing or cable is damaged, do not plug it in and do not attempt to use it until after contacting your UNIFIRE dealer for assistance.

### **Setup**

- ◆ Remove all packing materials from shipping box. Check that all foam and plastic padding is removed, especially in the nozzle area.
- ◆ Place fog machine on a flat surface and remove fog liquid tank cap.
- ◆ Fill with UNIFIRE Fog Liquid or other high-quality water-based fog fluid. Any other types of fluid can damage the unit. When filled, place cap back on liquid tank.
- ◆ Firmly attach the remote control cable to the proper input on the rear of the machine.

## Operation

- ◆ Plug power cord into a grounded electrical outlet. If necessary, turn power switch on rear of unit to “ON” position. Warm-up is complete when green lamp lights up on remote unit.
- ◆ To emit fog, press the appropriate button on the remote for the desired length of time.
- ◆ The remote unit’s lamp will cycle on and off as the machine re-heats to the proper operating temperature.
- ◆ For further information on operating your UNIFIRE Fog Machine, see the section titled, “Remote Control Operation”.

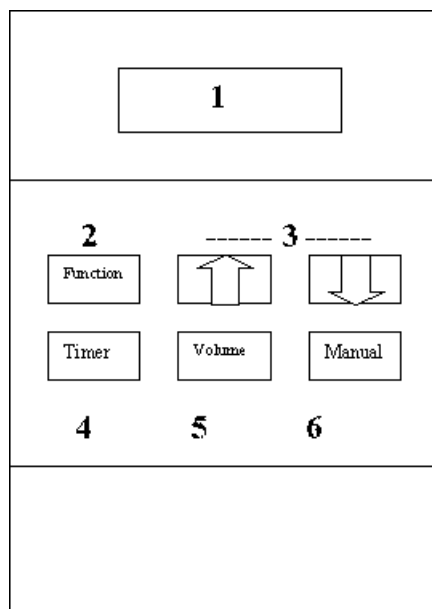
If your model includes a mounting bracket designed for overhead installation, it may be installed at floor level or suspended overhead. If the unit is to be mounted using the bracket, it is important that the fog does not shoot directly at any one’s face. Whatever installation method you choose, do not allow the unit to have more than a 15 degree angle of inclination.

Important: Always monitor tank fluid level as you are fogging. Running a fog machine with no fluid can permanently damage the unit.

If you experience low output, pump noise or no output at all, unplug immediately. Check fluid level, the external fuse, remote connection, and power from the wall. If all of the above appears to be O.K., plug the unit in again. If fog does not come out after holding the remote button down for 30 seconds, check the hose attached to the tank to make sure there is fluid going through the hose. If you are unable to determine the cause of the problem, do not simply continue pushing the remote button, as this may damage the unit. Return the machine to your UNIFIRE dealer.

## Remote Control Operation

- ◆ **Z-1:** 10 meter wired remote controller with five-prong plug for UNIFIRE Fog Machine models Z-800 and Z-1000. The red lamp indicates that the unit is receiving power. When the fog machine has reached operating temperature the green lamp on this remote control will light up, indicating that the operator may begin fog emission by pressing the red button. The green lamp turns off during fog machine warm-up (approx. 4 minutes) and re-heating cycles (approx. 1-2 minutes), and turns on when the machine becomes operational.
- ◆ **Z-2:** 10 meter wired multi-function remote controller with 5-pin XLR connector for UNIFIRE



Fog Machine models Z-1500 and Z-3000. Its interface allows the operator to customize fog machine functions by adjusting fogging duration, interval and volume. Its LCD displays current operating parameters, which are automatically stored in non-volatile memory, allowing the machine to be powered down without losing function settings. Instructions below:

### Description of the elements of the Z-2:

- (1) LCD-Display
- (2) Function-key
- (3) Up-/Down-keys
- (4) Timer-key
- (5) Volume-switch
- (6) Manual-key

1. Via the Function key, you can adjust the desired settings. After pressing the Function key once, the display shows "Interval Set". Adjust the interval between each fog emission (within the range of 1 to 255 seconds) by means of the Up-/Down keys. By pressing the Function-key twice, the display shows "Duration Set". Adjust the duration of each fog emission (within the range of 1 to 20 seconds) by means of the Up/Down keys. Under the menus "Timer Out" and "Volume Out" you can adjust the output volume by means of the Up/Down keys. The menu "DMX Add" refers to adjusting the DMX address for DMX control or synchronization. Adjust the desired DMX-address by means of the Up/Down keys.
2. Press the Timer key to activate the timer function. The display shows the adjusted interval and the device counts the seconds down to "0". After that, the fog emission is triggered at the volume adjusted under "Timer Out". The duration depends on the settings adjusted under "Duration Set". If you wish to deactivate the timer function, press the Timer key once more.
3. Press the Volume switch for immediate triggering of the fog emission at the volume adjusted under "Volume Out". Press the Volume switch once more in order to stop the fog emission.
4. Press the Manual key for immediate triggering of the fog emission at 100 % volume. Let the Manual key loose in order to stop the fog emission.

**For control of the DMX settings please refer to the section on Page 6 titled UNIFIRE Z-Series Onboard DMX Fog Machine Settings**

- ◆ **Z-4:** 10 meter wired remote controller with five-prong plug for UNIFIRE Fog Machine models **Z-800** and **Z-1000**. To use the Z-4 remote control, press the red POWER button to enable the remote's functions. The two knobs allow the operator to customize fog machine operation by adjusting output duration and interval. Press the yellow TIMER button to activate the timer function. Adjust the interval between each fog emission (within the range of 10 seconds to 5 minutes) by means of the INTERVAL control knob. Adjust the duration of each fog emission (within the range of 1 to 10 seconds) by means of the DURATION control knob. When pressed, the green FOG button overrides all other function controls, and activates maximum output.
- ◆ **Z-5:** Wireless remote controller with five-prong plug for UNIFIRE Fog Machine models **Z-800** and **Z-1000**. Remote operation is possible up to a distance of 50 meters.
- ◆ **Z-8:** 10 meter wired timer and volume remote control for the **Z-1200** UNIFIRE Fog Machine. To engage the timer function presses the yellow button on the handheld unit. The duration knob regulates the length of time of the smoke blast. The blast can be set for between 1 and 15 seconds. The interval knob controls the amount of time between blasts. This can be set between 10 and 255 seconds. For continuous fogging, depress the red button marked **Continuous**. This will set the unit to fog steadily at the selected volume. The volume of fog produced is regulated via the output knob. This varies between 0 and 100% of maximum volume output. The green **Manual** button overrides any timer and/or volume settings to deliver a full volume blast of fog for as long as the button is held down.

***Cleaning your fog machine regularly will help reduce costly parts replacement and repair charges.***

**Maintenance**

Do not allow the fog liquid to become contaminated. Always replace the caps on the fog liquid container and the fog machine liquid tank immediately after filling.

After every 40 hours of continuous operation, it is recommended to run a cleaning solution composed of 80% distilled water/20% white vinegar through the system to prevent the accumulation of particulate matter in the heating element. The recommended cleaning regimen is as follows:

1. While unit is unplugged and cool, unscrew nozzle at very front of unit and clean out debris with vinegar and a pipe cleaner, making sure that the hole is free of clogs.
2. Empty all fog fluid from machine. Add cleaning solution to tank. Plug unit in and begin warm up.
3. Run unit in a well-ventilated area until tank is empty.
4. Replace nozzle.
5. Cleaning is now complete. Refill with fog liquid.

Note: All fog machines are prone to clogging due to the thick consistency of fog fluid and the high temperature at which it vaporizes. However, a properly maintained fog machine should provide years of reliable use.

Clean with a dry cloth only.

Store dry.

**Performance Notes**

- ◆ All fog machines develop condensation around the output nozzle. Because this may result in some moisture accumulation on the surface below the output nozzle, consider this condensation when installing your unit.
- ◆ All fog machines may sputter small amounts of fog occasionally during operation and for a minute or so after being turned off.
- ◆ All fog machines have a recycling period after long bursts when the machine will shut itself down for a short period in order to heat back up. During this time no fog can be produced. The green "READY" L.E.D. on the remote will be off during this time and will light up again when the machine is ready.
- ◆ If the supply cord is damaged, it must be replaced by manufacturer or its service agent or similarly qualified person in order to avoid a hazard.

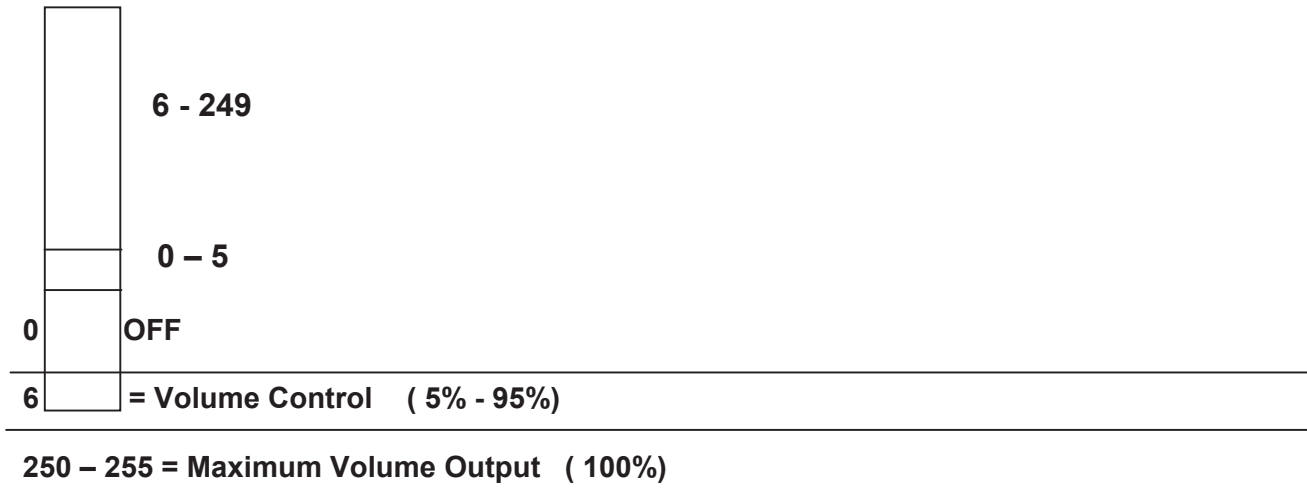
**Please read and save these instructions**

<b>Unifire Z-Series Onboard DMX Fog Machine Settings</b>
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## DMX Setting for Z-series fog machines with onboard DMX

### Channel A

250-255



The Z-1200, Z-1500 and Z-3000 fog machines all have onboard DMX control. Currently all three models use 1 channel to control volume output operation. Each channel has a value range of 0 to 255. Timer functions such as duration and interval can be programmed using the DMX controller or the DMX control software being used by lighting and effects operator.

**If Channel A has a value from 0 to 5, the unit is OFF.**

**Between the values 6 to 249 the volume of fog output is regulated.** With 6 being the minimum volume of fog produced and 249 approaching the maximum. The volume output rises as the DMX value is increased.

**If Channel A has a value from 250 TO 255, the machine will operate at maximum output.**

Note: In the example above, if the machine were assigned the DMX address of 124, Channel A would correspond to DMX address 124.

In general, UNIFIRE fog machines with onboard DMX conform to the following performance specifications:

1. Average Operating temperature = 250°C
2. Fogger can maintain maximum output for 30 seconds or more
3. Fogger can maintain constant output at 30% volume setting (roughly a value of 75).